northeastern Washington on the 17th and 18th, causing the rapid disappearance of snow in those localities. The prevailing winds for the district were from a westerly direction, and the following maximum velocities were reported: Tatoosh Island, Wash., 66 east on the 6th and North Head, Wash., 66 southeast on the 17th.

The cooperative observer at Harbor, a coast station in extreme southwestern Oregon, makes the following statement:

A peculiar weather condition has existed all the month. An earthquake shock was felt by all on the 15th; just one wave which lasted the fraction of a second, and was felt at Crescent City, Cal. I felt several very little seismic waves on the night of the 20th.

The observer at Yale, Cowlitz County, Wash., also reported a distinct earthquake shock at 10 p. m. on the 19th.

THE SEASON'S SNOWFALL; AND SNOWFALL CONDITIONS IN THE MOUNTAINS AT THE HEADWATERS OF THE COLUMBIA RIVER AND ITS TRIBUTARIES AT THE END OF MARCH, 1913.

MONTANA.

The snowfall in January, 1913, was considerably above the normal in most of the mountain ranges within the Bitter Root, Flathead, Clarks Fork, and Missoula drainage basins of the upper Columbia. Mild temperatures the latter part of that month caused partial melting, and the snow became very solid. The February snowfall was generally light, and chinook conditions still further reduced the depth, but little snow melted and the run-off from the higher mountain districts was small. The March snowfall added somewhat to the accumulated depth in the mountains, and almost continuous night temperatures below freezing prevented any material loss by run-off. The small streams in nearly all sections carried less than the usual flow of water during March. The conditions at the close of the season in all the principal mountain ranges indicated more than the normal amount of water in the streams.—R. F. YOUNG, *Section Director.*

WYOMING.

Although but a moderate amount of snow has fallen during the winter, conditions have been such as to promise a fair supply of water for the coming season. The temperature has been low generally with sufficient melting to cause the snow to pack well without dissipation. During the month of March an average of 24.5 inches augmented that already stored in Yellowstone Park. On the headwaters of the Snake River much less snow is reported than at the same time last season, but it is reported as well packed. A normal amount is reported at high elevations, promising a sufficiency of water for late in the season.—R. Q. GRANT, *Section Director.*

IDAHO.

The snowfall from the Salmon River northward was the heaviest of recent years, and continued low temperatures have prevented rapid melting, so that the mountains of that section are covered by from 1 to 12 feet of solid snow, while there is still much snow remaining in many of the valleys. Hence the outlook is for a heavy flow of water in the streams of that section.

South of the Salmon River the snowfall was much below normal, but the temperatures were persistently low, so that in the higher mountains the snowfall of practically the entire winter still remains. The snow is generally solid, but is less drifted than usual, and there have been few slides. It is believed that the waterflow from this section will be below normal, but that the deficiency will not be serious.—EDWARD L. WELLS, *Section Director.*

WASHINGTON.

The snowfall in the mountains has been the heaviest of any season in the last 14, possibly 20, years, or since the great snowfall of 1893. While not severe, the winter was uniformly cold, consequently the snow melted slowly and less than usual, so that the depth remaining is comparatively great. High winds have piled it in great drifts, and in some places it is packed to nearly the consistency of ice.

The season's snowfall to the end of March at Snoqualmie Pass, in the Cascade Mountains, was 540 inches; in 1912 it was 416; in 1911, 327; in 1910, 422 inches.

In general the December snowfall was two to three times the average; in January it was the heaviest in 14 to 20 years; in February it was light, much less than average; and in March it was considerably more than average.—G. N. SALISBURY, *Section Director.*

OREGON.

Snow fell earlier than usual this winter, small amounts having fallen in October in many elevated sections, while above the 4,000-foot level the snowfall in a few localities was considerable. Although much snow fell during November in the higher levels, yet, in general, the quantity was below normal. Nearly the average amount fell during the latter part of December, and that remaining on the ground at the close of the month was about normal, although not so well packed as usual. Snowfall was heavy in January, and as cool weather obtained generally throughout the month very little melted, but instead great quantities drifted into ravines, canyons, and exposed places in the forests. The February snowfall was below normal, but temperatures were low, which hindered melting, and as practically all of the fall for the preceding two months had remained on the ground the amount on March 1 approximated the normal except in the Blue Mountains, where it was deeper than usual. March was cool, with snowfall above the average; that remaining on the ground April 1 was up to the average in the valleys and more than usual in elevated sections where drifting had caused a solid snow pack. In some localities it was nearly the consistency of ice, and in general favorably conditioned for slow melting and a gradual run-off under normal weather conditions in April and May. In most agricultural sections the soil is well saturated with moisture, as the early snow fell on unfrozen ground.—E. A BEALS, *Section Director.*